ABSTRACT

A high volume electrolytic water treatment system and process for treating wastewater. The system and process is designed to treat waste streams that are both complex and with variable contaminate compositions. The system includes pumping influent water to a headworks screen for removing solids in the water. The screened water is then discharged into primary and secondary surge tanks. The tanks include electrocoagulation electrodes. The electrodes, using alternating current, destabilize materials such as fats, oils, greases and surfactants. The pretreated influent water is then pumped to one or more elongated flow-through modules. The flow-through modules also include electrocoagulation electrodes for further treating of the influent water. From the flow-through modules, the treated water is sent to a foam removal apparatus and then to a clarifier. Clear water from the clarifier then flows into an effluent weir and discharged from the system thereby completing the water treatment process.